

35 U.S.C. § 102(b) as anticipated by DE 198 36 986 A1 (hereinafter "Guth"). Respectfully, Applicant traverses.

Claim 1, from which claims 2-9 ultimately depend, relates to a sealing arrangement including a sealing ring having a sealing lip curved forward in the direction of an area to be sealed off. The sealing ring is pre-tensioned to surround and form a seal around a circumference of a machine element. The sealing lip includes at least one recess on a side facing radially away from the machine element, in which the recess only connects and allows flow between the area to be sealed off and a surrounding area if the sealing ring is incorrectly mounted and the sealing lip is erroneously curved forward in the direction of the surrounding area.

When the machine element is inserted such that the sealing lip is erroneously curved forward in the direction of the surrounding area, the recess faces the machine element (P. 8, lines 21-26; Figure 3). In this manner, a pressure test may easily determine the faulty condition, since any pressure applied is very rapidly released via the recess. (P. 9, lines 1-6).

Claim 10, from which claims 11-15 ultimately depend, relates to a sealing arrangement for forming a seal around a machine element, comprising a sealing ring including a sealing lip, the sealing lip including at least one recess on a side of the sealing lip facing radially away from the machine element.

Claim 16, from which claim 17 ultimately depends, relates to a sealing element for forming a seal around a machine element, comprising a sealing ring operable to permit flow between an area to be sealed off and a surrounding area if the sealing ring is incorrectly mounted on the machine element.

Holzer purportedly relates to a radial shaft sealing ring. (Holzer, Abstract). Referring to Figure 1 of Holzer, the washer-like sealing element 2 is curved forward to one side in the direction toward the sealed-off medium and is expanded in the radial direction. The sealing element 2 contacts the sealed-off shaft 3 only in the region of the contact area A. (See Holzer, Col. 4, lines 3-8). The contact area of the

sealing element and the areas of the sealing element adjacent both sides of the contact area in the axial direction are made with smooth surfaces and merge steadily with each other with a curvature. (See Holzer, Col. 4, lines 11-15). In one embodiment, the base area 4 is broken by a multiplicity of swirl fins 5. (See Holzer, Col. 4, lines 30-33). The swirl fins have a negative inclination and the backpumping effect is active only in the axial direction and can have no influence on the pressure and flow conditions in the region of the contact surface A with the sealed off shaft. (See Holzer, Col. 4, lines 43-48).

To anticipate a claim, each and every element as set forth in the claim must be found in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). That is, the prior art must describe the elements arranged as required by the claims. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

One or more of these limitations may be inherent in the reference. However, the fact that a certain characteristic may occur or be present in the prior art is not sufficient to establish inherency of that characteristic. Rather, to establish inherency, the missing descriptive matter must necessarily be present in the prior art reference. See In re Oelrich, 666 F.2d 578, 581-82 (C.C.P.A. 1981).

It is respectfully submitted that Holzer does not identically disclose, or even suggest, each and every limitation of claim 1. Specifically, Holzer does not disclose a sealing ring having a sealing lip that has, "at least one recess which only connects and allows flow between the area to be sealed off and the surrounding area if the sealing ring is incorrectly mounted," as recited in claim 1. As described above, Holzer discloses the areas of the sealing element adjacent both sides of the contact area in the axial direction are made with smooth

surfaces. Holzer does not at disclose or suggest at least one recess, as recited in claim 1.

Additionally, Holzer does not disclose a recess as "[allowing] flow . . . if the sealing ring is incorrectly mounted," as recited in Claim 1. As described above, Holzer describes the swirl fins as having no influence on the pressure and flow conditions in the region of the contact surface A. Therefore, the recess, described in claim 1 is unique from the swirl fins in Holzer because the swirl fins do not allow flow between the area to be sealed off and the surrounding area. Since claim 10, from which claims 11-14 ultimately depend, and claim 16, from which claim 17 ultimately depends, both involve a recess, neither of these claims are anticipated by Holzer.

For at least the foregoing reasons, it is respectfully submitted that Holzer does not anticipate claim 1, 10 and 16. Further, since claims 2-6 ultimately depend from claim 1, claims 11-14 ultimately depend from claim 10 and claim 17 ultimately depends from claim 16, it is respectfully submitted that Holzer does not anticipate these claims for at least the same reasons.

Further, claims 10-15 were rejected under 35 U.S.C. § 102(b) as anticipated by DE 198 36 986 A1 (hereinafter "Guth"). Respectfully, Applicant traverses.

Guth purportedly relates to a radial shaft seal. Referring to Figure 1 of Guth, the first surface profiling 4 which faces shaft 3 has sawtooth recesses 6 which extend from the axially bulging area of the sealing disk 1. (See Guth Col. 3, lines 22-26). Between each sawtooth recess 5, an essentially U-Shaped recess 11 which is open to the outside radially is provided on the side facing away from the shaft, forming a second surface profiling 5. (See Guth Col. 3, lines 27-30) Referring to Figure 2 of Guth the Sawtooth recesses 6 of the first surface profiling 4 are arranged adjacent to one another with an axial distance between them. (See Guth Col. 3, lines 33-37). Additionally, the large volume of sawtooth recesses are suitable for collecting impurities from the medium to be sealed. (See Guth Col. 1-2, lines 65-2).

It is respectfully submitted that Guth does not identically disclose each and every limitation of claim 10. Specifically, Guth does not disclose "the sealing lip, including at least one recess on a side of the sealing lip facing radially away from the machine element" as disclosed in claim 10. Guth only discloses recesses, specifically, sawtooth recesses, that are "axially spaced apart" and "U-shaped recesses" that are open. Guth does not disclose a seal with one recess.

For at least the foregoing reasons, it is respectfully submitted that Guth does not anticipate claim 10. Further, since claims 11-15 ultimately depend from claim 10, it is respectfully submitted that Guth does not anticipate these claims for the same reason.

For at least the foregoing reasons, it is kindly requested that the rejections of claims 1-6, 10-15, 16 and 17 under 35 U.S.C. § 102(b) be withdrawn.

II. REJECTION OF CLAIMS 7-9 UNDER 35 U.S.C. § 103(a)

Claims 7-9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Holzer in view of Guth. Respectfully, Applicant traverses.

Claim 7-9 depend from claim 1 and therefore include all the limitations of claim 1. As more fully set forth above with respect to claim 1, it is respectfully submitted that Holzer and Guth do not disclose, or even suggest, a sealing lip that has "at least one recess which *only* connects and allows flow between the area to be sealed off and the surrounding area if the sealing ring is incorrectly mounted and the sealing lip is erroneously curved forward in the direction of the surrounding area" (emphasis added), as recited in claim 1.

In rejecting a claim under 35 U.S.C. § 103(a), the Examiner bears the initial burden of presenting a prima facie case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). Moreover, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim element and it must also suggest combining the elements in the manner contemplated by the claim.

See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990). Thus, the "problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem." Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998). It is respectfully submitted that, as discussed above, the references relied on, whether taken alone or combine, do not suggest in any way modifying or combining the references so as to address the problems that are met by the presently claimed subject matter, as referred to above.

Specifically, Holzer only discloses a sealing element with a smooth surface. Guth discloses a surface profiling with recesses, however Guth does not suggest that these recesses only allow flow when the sealing ring is incorrectly mounted. In fact, the recesses described in Guth are suitable for collecting impurities and recirculating the medium to be sealed in the direction of the space to be sealed. There is no suggestion of combining such references to make a sealing ring with at least one recess that only permits flow when the sealing ring is incorrectly mounted. Accordingly, there is no evidence that the references relied upon, whether taken alone or modified, would provide the features and benefits of claims 7-9, which ultimately depend from claim 1. It is respectfully submitted that claims 7-9 are allowable for these reasons.

III. CONCLUSION

For at least the foregoing reasons, Applicant respectfully submits that the present invention is new,

non-obvious, and useful. Prompt reconsideration and allowance of pending claims 1-17 are therefore earnestly solicited.

Respectfully submitted,

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